

**TABLE M.5.6.1.2–6. — National Ignition Facility Accident Frequency and Risk (Unfavorable Meteorology)**

Accident	MEI			Offsite Population <sup>a</sup>		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>	Dose (rem)	LCFs <sup>b</sup>	Dose (person-rem)	LCFs <sup>c</sup>
Earthquake during No Action Alternative operations	$2.00 \times 10^{-8}$	$1.23 \times 10^{-10}$	$7.38 \times 10^{-14}$	$6.10 \times 10^{-8}$	$3.66 \times 10^{-11}$	$2.67 \times 10^{-10}$	$1.60 \times 10^{-13}$	$4.44 \times 10^{-8}$	$2.66 \times 10^{-11}$
Earthquake during depleted uranium shot	$2.00 \times 10^{-9}$	$2.19 \times 10^{-11}$	$1.31 \times 10^{-14}$	$9.02 \times 10^{-9}$	$5.41 \times 10^{-12}$	$4.51 \times 10^{-11}$	$2.71 \times 10^{-14}$	$7.48 \times 10^{-9}$	$4.49 \times 10^{-12}$
Earthquake during highly enriched uranium shot	$2.00 \times 10^{-9}$	$2.28 \times 10^{-11}$	$1.37 \times 10^{-14}$	$9.34 \times 10^{-9}$	$5.61 \times 10^{-12}$	$4.66 \times 10^{-11}$	$2.80 \times 10^{-14}$	$7.66 \times 10^{-9}$	$4.60 \times 10^{-12}$
Earthquake during thorium shot	$2.00 \times 10^{-9}$	$2.29 \times 10^{-11}$	$1.37 \times 10^{-14}$	$9.52 \times 10^{-9}$	$5.71 \times 10^{-12}$	$4.62 \times 10^{-11}$	$2.77 \times 10^{-14}$	$8.20 \times 10^{-9}$	$4.92 \times 10^{-12}$
Earthquake during tracer shot	$2.00 \times 10^{-9}$	$1.40 \times 10^{-11}$	$8.42 \times 10^{-15}$	$6.52 \times 10^{-9}$	$3.91 \times 10^{-12}$	$3.05 \times 10^{-11}$	$1.83 \times 10^{-14}$	$4.88 \times 10^{-9}$	$2.93 \times 10^{-12}$
Earthquake during plutonium without yield shot	$2.00 \times 10^{-9}$	$4.33 \times 10^{-11}$	$2.60 \times 10^{-14}$	$1.67 \times 10^{-8}$	$1.00 \times 10^{-11}$	$9.39 \times 10^{-11}$	$5.63 \times 10^{-14}$	$1.65 \times 10^{-8}$	$9.88 \times 10^{-12}$
Earthquake during plutonium with yield shot	$2.00 \times 10^{-9}$	$2.32 \times 10^{-11}$	$1.39 \times 10^{-14}$	$9.96 \times 10^{-9}$	$5.98 \times 10^{-12}$	$5.01 \times 10^{-11}$	$3.01 \times 10^{-14}$	$8.54 \times 10^{-9}$	$5.12 \times 10^{-12}$

Source: LLNL 2003d.

<sup>a</sup> Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.<sup>b</sup> Increased likelihood of a latent cancer fatality.<sup>c</sup> Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.